

REMARKS**1. *Introduction***

Claims 1-20 are pending in the application. Claims 1-17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Afriat et al. (US 6,203,576) in view of Davidson (US 5,180,394).

Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burstein et al. (US 4,298,992) in view of Davidson (US 5,180,394).

Claims 21-23 have been added. Support for these claims may be found at paragraphs 28 and 29 of the specification.

2. *Obviousness Rejections are Improper*

Applicant respectfully traverses the obviousness rejections and requests reconsideration. Neither Afriat and Davidson, nor Burstein and Davidson, taken alone or in combination teach or suggest the use of a diffusion hardened surface at the contact zones of a cam, or on a surface where a load bearing surface *impacts* a non-load bearing surface.

Obviousness can be established by combining features of references only if there is teaching in the prior art references, *see In Re Donaldson*, 16 F.3d 1189, 1193-94 (Fed. Cir. 1994), supporting such a combination. *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992); *Carella v. Starlight Archery and Pro Line Co.*, 804 F.2d 135, 140 (Fed. Cir. 1986). To be combinable, references must suggest the advantages achieved by the invention, and must lead the person of ordinary skill in the art to expect to obtain those advantages by combining the references. *In re Sernaker*, 702 F.2d 989, 994 (Fed. Cir. 1983). It is insufficient that one skilled in the art might find it "obvious to try" combining the prior references. *In re Geiger*, 815 F.2d 686, 688 (Fed. Cir. 1987). The obviousness standard requires that one skilled in the art can look at the prior art references and combine them into the patent as the patentee filed it. *Motorola, Inc. v. Interdigital Technology Corp.*, 121 F.3d 1461, 1471 (Fed. Cir. 1997).

As discussed in paragraph 11 of the Application, the quick flexion motion of the knee will cause the post of the tibial insert to abruptly contact the horizontal cam. In addition, to wear placed upon the central post, repeated stressful contact from the central post to the horizontal cam may cause undue cam fatigue ultimately leading to cam deformation or failure. The inventors have determined that a suitable diffusion-hardened surface along the cam at the contact interface between the cam and the post of a polymeric insert cause will reduce undue cam fatigue and cam deformation or failure.

The holding in *In re Royka*, 490 F.2d 981, 984 (C.C.P.A. 1974) states that all of the claim limitations must be taught or suggested by the prior art. Here, in order for the Davidson references to form the basis of a rejection under 35 U.S.C. §103(a), it must disclose or suggest, each of the claimed elements of independent claims 1, 10, and 16 (including the dependent claims). If an independent claim is nonobvious under 35 U.S.C. §103(a), then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 1076, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988).

The Office Action asserts that Davidson teaches diffusion-bonded or “diffusion-hardened” coating of load bearing and non-load bearing surfaces of implants such as a knee joint prosthesis with blue-black or black zirconium oxide (col. 1, lines 14-35 and lines 61-68; col. 2, lines 1-8; col. 5, lines 11-26 and lines 47-55; col. 6, lines 51-68; and col. 7 lines 1-11 and lines 36-48.). Davidson however does not teach a knee joint prosthetic such as Applicant’s claimed invention, especially the need for a diffusion-hardened surface along those portions of a knee joint prosthetic that has contact or impact zones.

Claim 1 requires that the cam have a diffusion-hardened surface along a portion of the cam for adding strength and wear resistance to the **contact zones** of the cam.

Claim 10 requires a diffusion-hardened coated surface on the non-load bearing surface along a portion of its length for adding strength to areas where the second load bearing surface **impacts** the non-load bearing surface.

Claim 16 requires that the cam have diffusion-hardened surface along a portion of its length for adding strength to the **impact zones of the cam**.

Reading the Davidson reference, nowhere does Davidson teach contact zones of a cam, nor does it teach a non-load bearing surface having a diffusion-hardened coated surface along a portion where a second load bearing surface impacts the non-load bearing surface. No mention of a cam or impact surfaces is discussed in Davidson.

The Office Action fails to provide a suggestion or genuine motivation to combine Afriat and Davidson, or Burstein and Davidson. When an obviousness determination is based on multiple prior art references, as is the case here, there must be a showing of some “teaching, suggestion, or reason” to combine the references. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579, 42 U.S.P.Q. 2d 1378, 1383 (Fed. Cir. 1997) (also noting that the “absence of such a suggestion to combine is dispositive in an obviousness determination”). *See also, SmithKline Diagnostics, Inc. v. Helena Lab. Corp.*, 859 F.2d 878, 886-87, 8 U.S.P.Q. 2d 1468, 1475 (Fed. Cir. 1988). *See In re Bond*, 910 F.2d 831, 15 U.S.P.Q. 2d 1566 (Fed. Cir. 1990) (the PTO erred in rejecting the claimed invention as an obvious combination of the teachings of two prior art references when the prior art provided no teaching suggestion or incentive supporting the combination). The “mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” M.P.E.P. § 2143.01; *see also, In re Mills*, 916 F.2d 680, 682, U.S.P.Q. 2d 1430, 1432 (Fed. Cir. 1990). Finally, although a prior art device “may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.” *Id.*

The obviousness rejection is not based on a motivation provided by the references as required under 35 U.S.C. §103(a), but is instead based on the Examiner’s use of hindsight to create an obviousness rejection by selecting art based on knowledge of Applicant’s invention. “When it is necessary to select elements of various teaching in order to form the claimed invention, we ascertain whether there is any suggestion or motivation in the prior art to make the selection made by the applicant.” *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 U.S.P.Q. 543, 551 (Fed. Cir. 1985).

In essence the Examiner admits in her hindsight reconstruction of the claimed invention, to the use of the instant specification and claims as a template, but relying on the desirability of a combination of elements according to Applicant’s claims. However, since the applied references neither recognize the advantages of such a combination, there is no

motivation to be found in those references for making the combination. Nor do the references provide any other form of motivation sufficient to render the pending claims obvious.

3. Conclusion

Applicant respectfully requests withdrawal of the rejection to claims 1-17 and 19-20 as being unpatentable over Afriat et al. (US 6,203,576) in view of Davidson (US 5,180,394).

Furthermore, Applicant respectfully requests withdrawal of the rejection to claims 16-18 as being unpatentable over Burstein et al. (US 4,298,992) in view of Davidson (US 5,180,394).

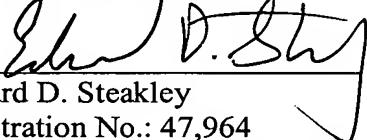
For these reasons it is submitted that the references cited by the Examiner do not render the claimed subject matter obvious and that the pending claims should be allowed. Applicant requests reconsideration and withdrawal of all rejections.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 06-2375, under Order No. HO-P02368US0 from which the undersigned is authorized to draw.

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Respectfully submitted,

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